

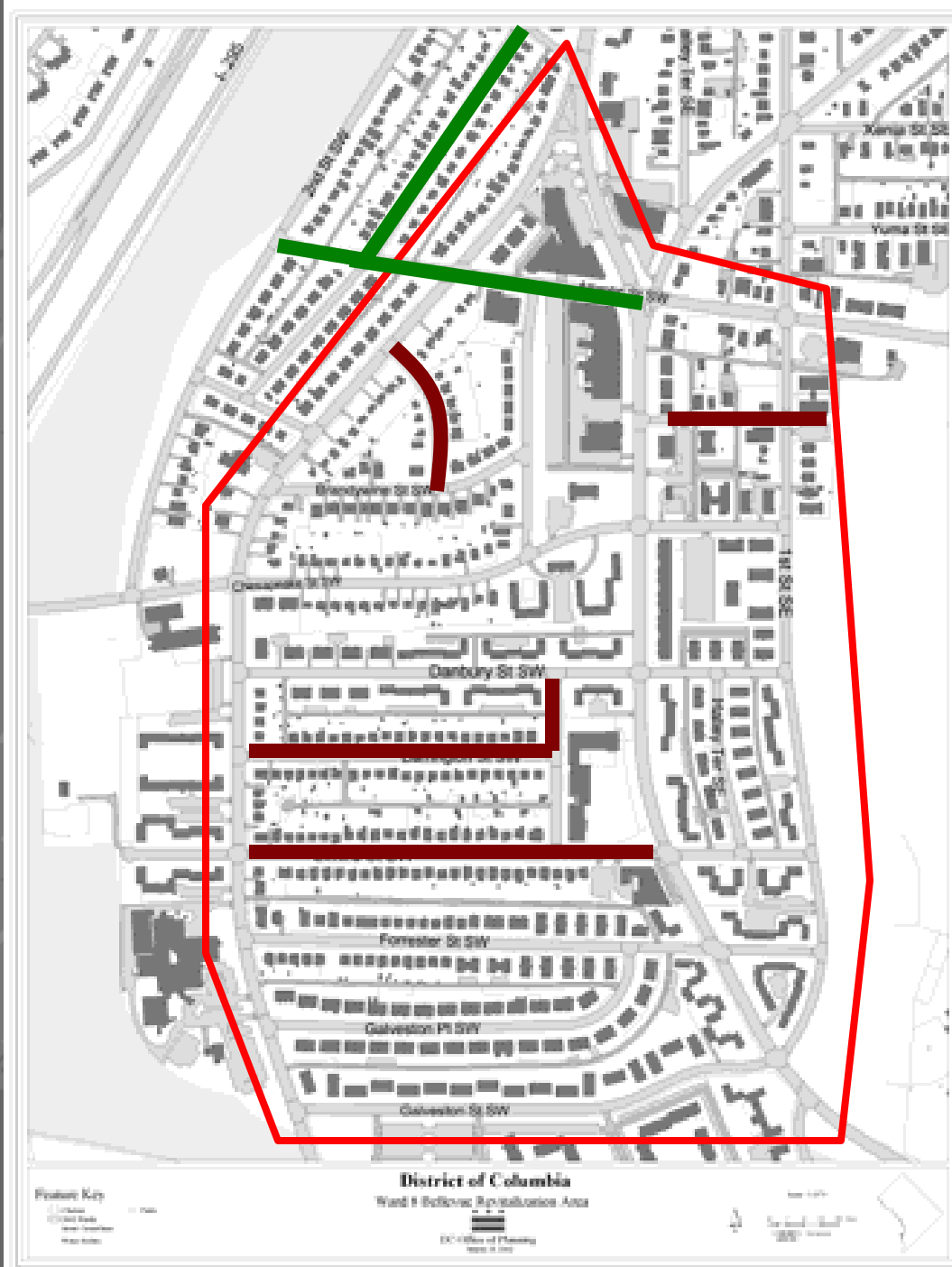
Infrastructure

- DDOT – Street improvements, Charles Thomas
- WASA – System Upgrades, Michael Marcotte

Infrastructure Improvements

Current DDOT Commitments

- Proposed 
- Completed 



Proposed Improvements *to the* Water System Infrastructure *in the* Anacostia Area *of* Washington, D.C.

Prepared
by

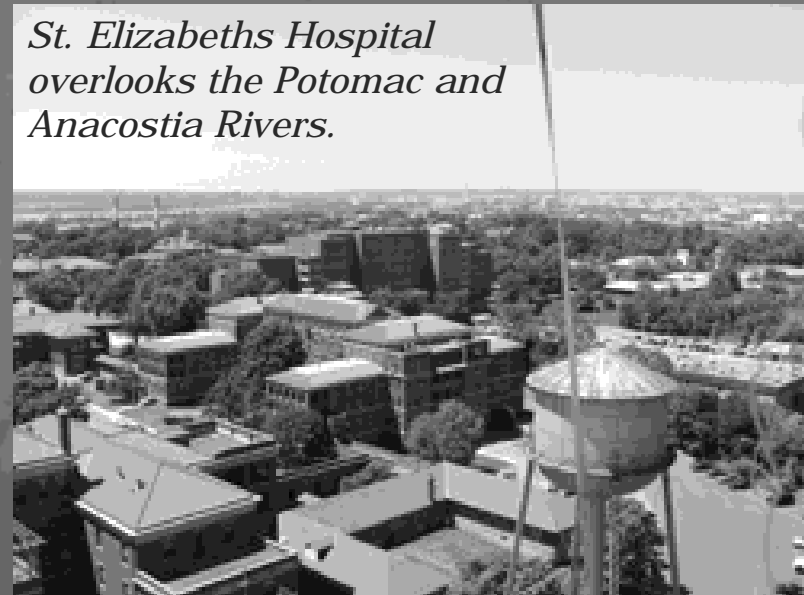


February 2003

Benefits *from* Proposed \$40 Million Improvements

- ◆ Maintains water quality
- ◆ More reliable fire protection
- ◆ Improved water pressure
- ◆ Enhanced reliability for the community
- ◆ Addresses water, fire, and maintenance challenges at the St. Elizabeths campus
- ◆ Supports future development

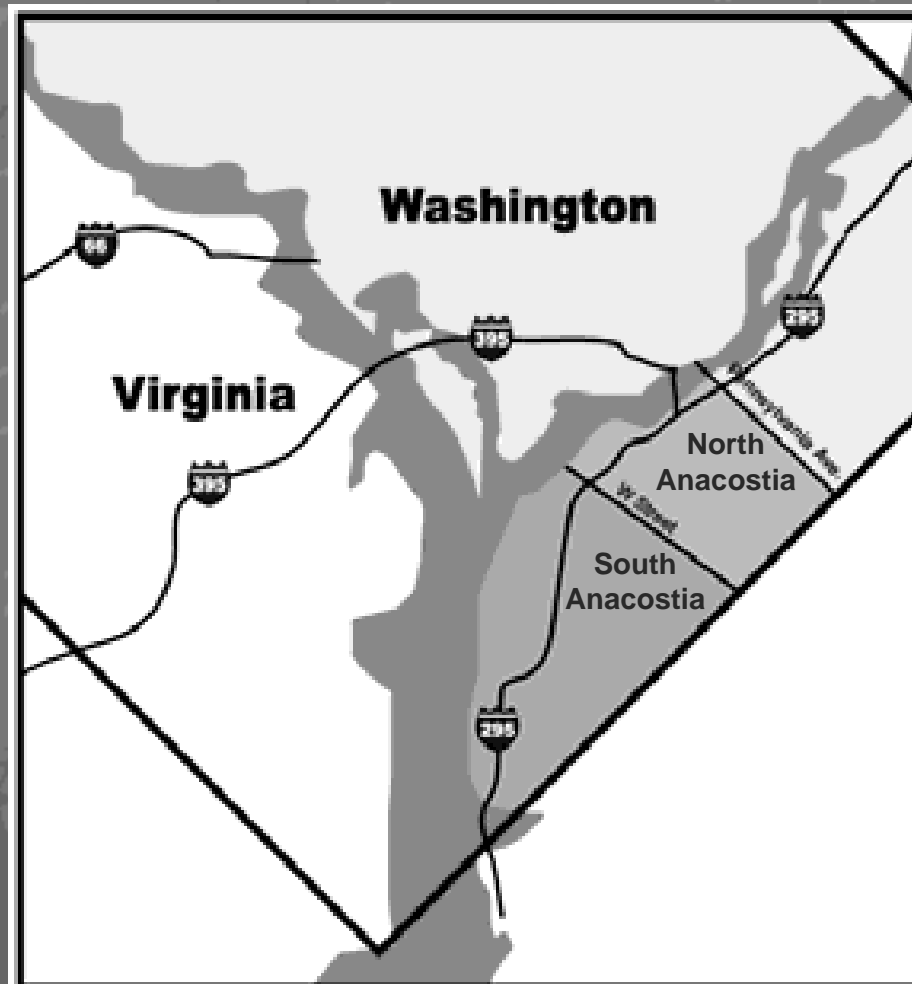
St. Elizabeths Hospital overlooks the Potomac and Anacostia Rivers.



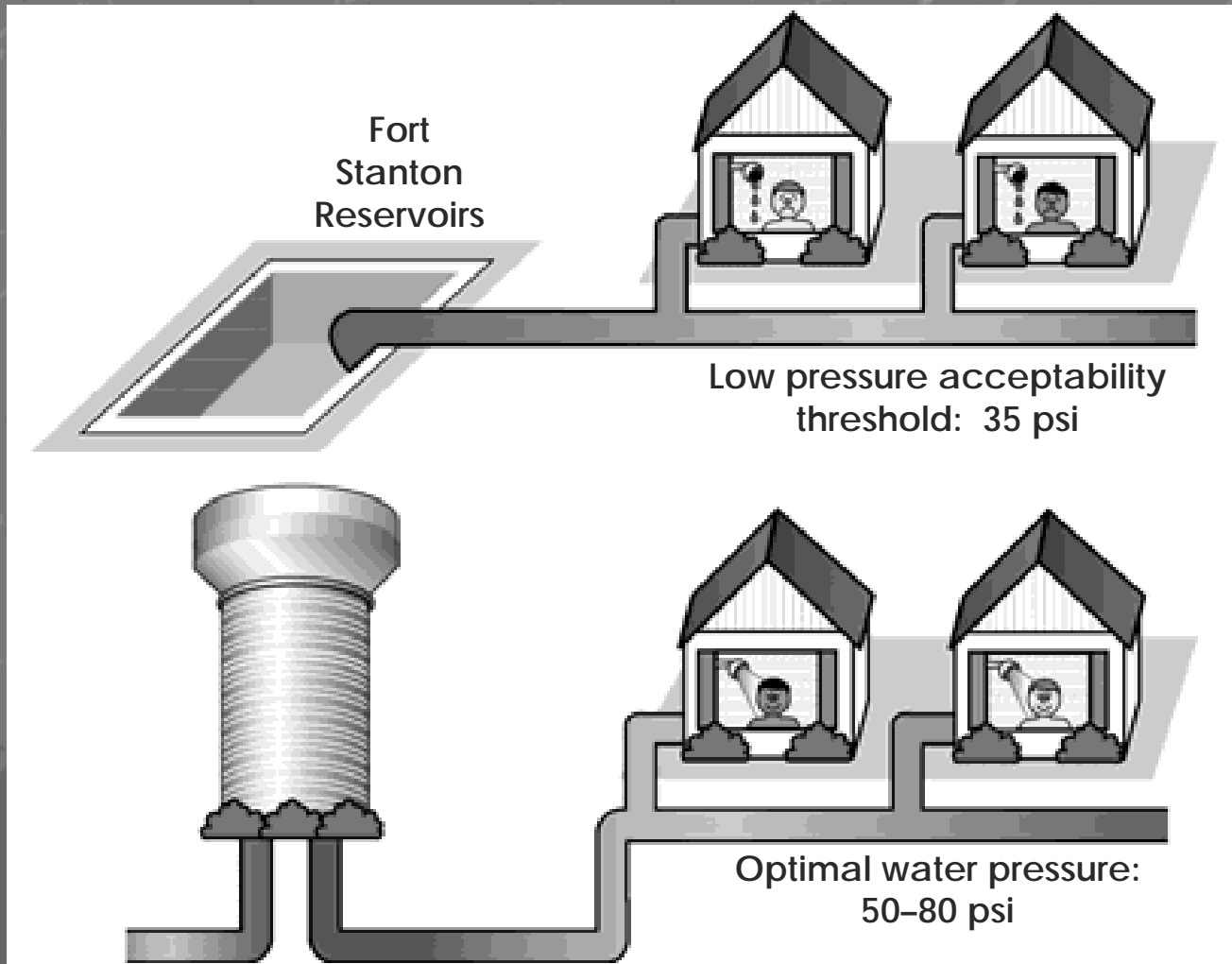
Anacostia Service Area Challenges

- Low pressure in southern Anacostia (south of W Street, SE)
- Low pressure at St. Elizabeths campus
- Under utilization of water storage at Fort Stanton Reservoirs
- Old water transmission system
- Aging equipment and building at Anacostia Pumping Station, constructed in 1913
- Fire protection

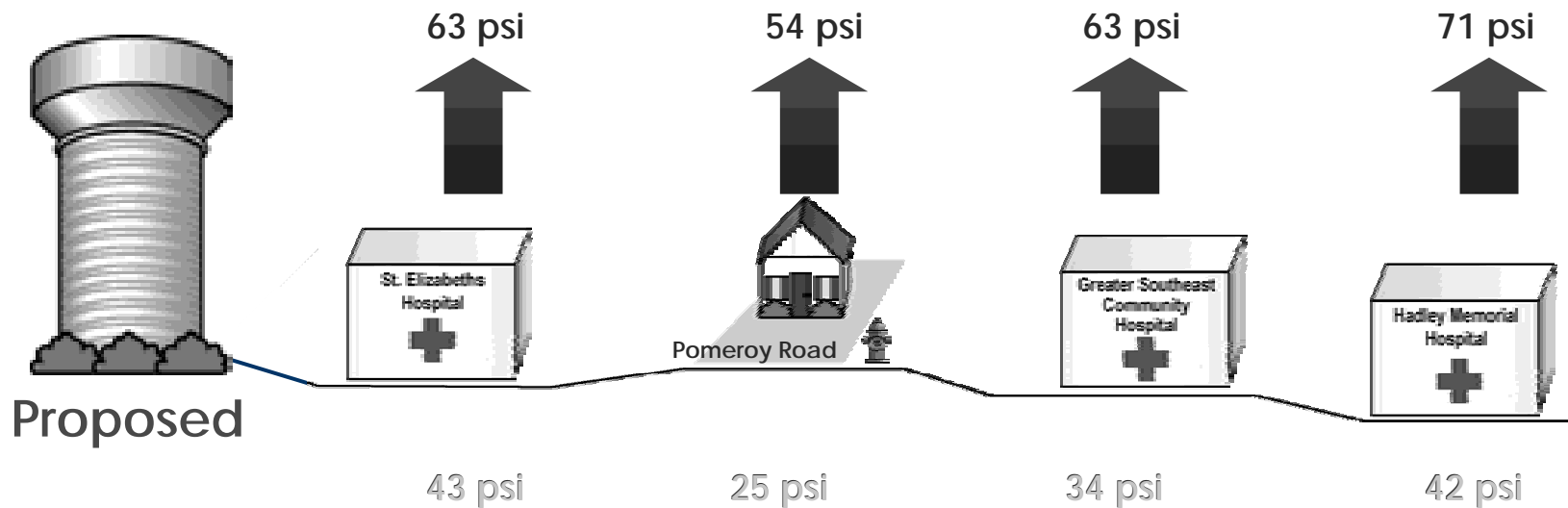
Improvements *in* Anacostia



Low Water Pressure *vs.* High Water Pressure

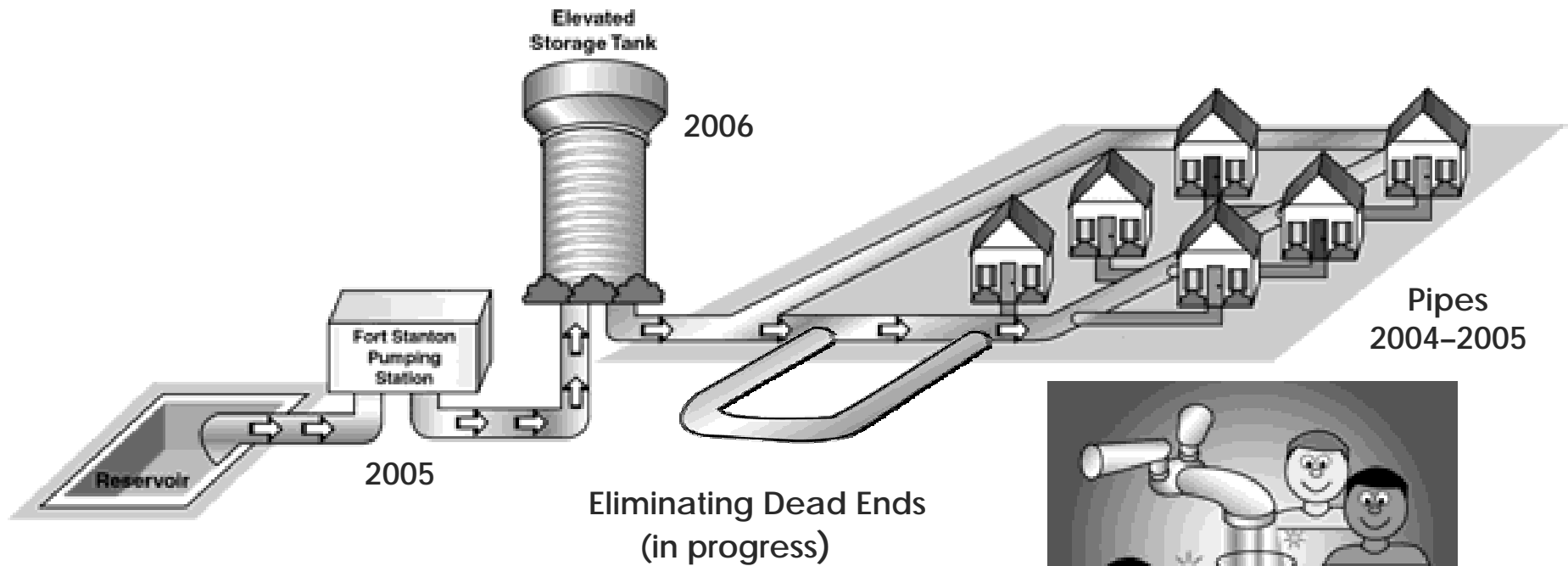


Before Conditions *vs.* After Conditions



35 psi – low pressure acceptability threshold
50–80 psi – optimum water pressure

Planned Improvements



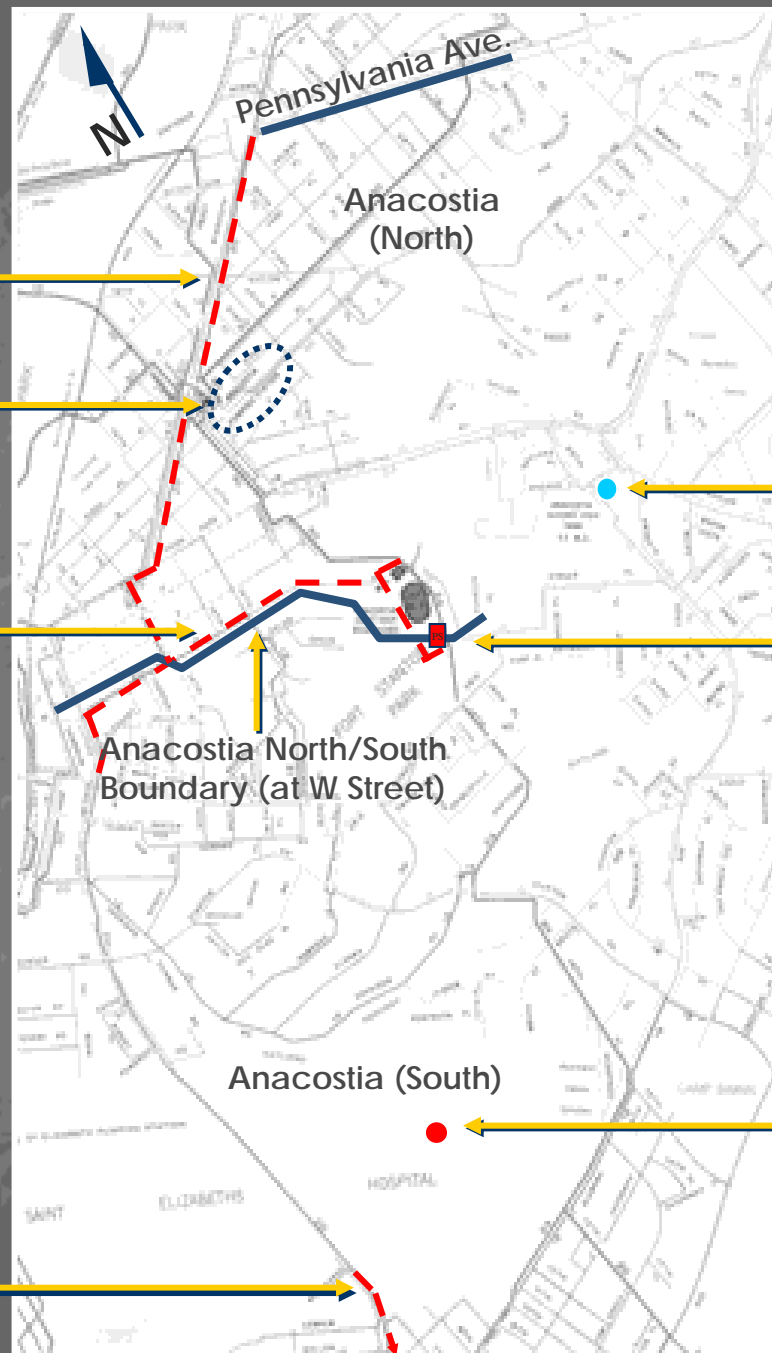
Proposed Improvements ... At a glance

Replace 6,000' of 20" pipe
along Minnesota Ave., from
Pennsylvania Ave. to W St.

Replace existing Anacostia
Pumping Station

New 5,300' of 24" pipe along
W St., from Ft. Stanton
Reservoirs to MLK Ave.

Replace 4,800' of 20" pipe
along MLK Ave. from
Milwaukee Pl. to Upsal St.



Rehabilitate
Boulevard Tank at
Massachusetts and
Alabama Avenue
*(not shown,
completed)*

Rehabilitate Good
Hope Road Tank
(completed)

Construct new Fort
Stanton Pumping
Station

Construct new 2 MG
elevated storage tank
at St. Elizabeths

Why Is Additional Water Storage Needed?

- Increased water pressure
- To provide additional supply during peak usage periods
- For fire fighting purposes
- Emergency reserve in the event of mechanical failures in the system
- Additional capacity to support economic development

Why ***an*** Elevated Storage Tank?

- Relies on gravity to maintain pressures
- Minimal mechanical working parts involved and is less vulnerable to mechanical breakdowns
- Less vulnerable to power failure
- Emergency reserve for system outages
- Does not make noise or emit fumes
- More reliable fire protection
- Less costly to operate and maintain
- Lifespan is 50+ years

Other Anacostia Projects

- Plan of Action:
 - **Continue ongoing programs**
 - Eliminate cross connections
 - Eliminate dead end water pipes
 - Replace old valves
 - Rehabilitate water pipes

Project Costs *for* Improvements *in* Anacostia

\$ (*in millions*)

■ Rehabilitate Good Hope and Boulevard Lane Tanks	0.9
■ Replace Anacostia Pumping Station	14.6
■ New Ft. Stanton Pumping Station	4.7
■ Replacement of pipes	9.1
■ 24" reinforcing pipes	4.1
■ 2 MG Anacostia elevated storage tank	<u>5.9</u>
Total	39.3

Construction Schedule

Project	Date Completed
Rehabilitate Good Hope and Boulevard Tanks	Dec 2002
Replace 20" pipe along Martin Luther King Jr. Avenue from Milwaukee Place to Upsal Street, SE	Dec 2004
Replace 20" pipe along Minnesota Avenue from Pennsylvania Avenue to W Street	Aug 2005
New 24" pipe along W Street from Ft. Stanton Reservoirs to Martin Luther King Jr. Avenue	Nov 2005
Construct new Fort Stanton Pumping Station	Dec 2005
Construct 2 MG Anacostia elevated storage tank	July 2006
Replace Anacostia Pumping Station (on Minnesota Avenue) with new pumping station on existing site	Dec 2006